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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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08/31/2005

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07/07/2006

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EXAMINER

ELLIS, SUEZU Y

ART UNIT

PAPER NUMBER

2878

DATE MAILED: 07/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/516,653	Applicant(s) JANUS ET AL.	
	Examiner Suezu Ellis	Art Unit 2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Reference numerals 12 and 30 of Fig. 1; reference numeral 21 of Fig. 3.

.Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

On page 2, line 5, replace "modul" with --module--.

Page 2, lines 17-18 recite "a base for mounting the means at a stationary or movable part, especially a vehicle". The wording is so awkward that it is unclear what a

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vehicle has to do with a stationary or movable part. Also, perhaps the applicant intends the means to be mounted "on a stationary or movable part" or "to a stationary or movable part"? Please rephrase "at a stationary or movable part" to be "on a stationary or movable part" or "to a stationary or movable part" if that's what applicant is intending.

Page 2, line 28 recites "supplying the same". Does applicant mean "supplying the signals" instead? Please rephrase "the same" to be "the signals" if that's what applicant is intending.

Page 3 lines 2 and 5, page 4 lines 25-26 and 29-30 and page 6 lines 19, 24 and 31, recite "fixedly connected". This phrase is confusing. What does applicant mean?

Page 3, line 3, replace "said one member" with --said at least one member--.

Page 3, lines 3-4, it is unclear what is carrying the solar module. Is it the at least one member or is it the pivot member? Please reword to better clarify. Note, the verb tense of "carrying" does not appear to be correct. Perhaps applicant intended "carries" instead.

Page 12, line 4, it is unclear what applicant means by "to avoid a permanent movement of the drive means fore and back". Please clarify. This wording appears to be awkward. Perhaps applicant intended "forward and backward" instead of "fore and back"?

Page 15 recites "pivot rods 13" in lines 16-29. However, in lines 12, 22 and 29, the specification recites "two solar panels 13". Reference numeral 13 cannot be used for both the pivot rods and the solar panels. Perhaps applicant intended the pivot rods to be reference numeral 12? Please clarify.

Appropriate correction is required.

Claim Objections

Claims 1-16 are objected to because of the following informalities:

With respect to claims 1-16, preamble recites “sun position follow-up means”.

This phrase is awkward. Perhaps applicant intended “following” instead of “follow-up”?

With respect to claim 1, claim language recites “said member (19)” throughout the claim. Replace “said one member” with --said at least one member-- in order to differentiate the “at least one member” from the “pivot member” without relying on the reference numerals.

Claim 1, line 25 recites “the end portion of the member (19)”. There is insufficient antecedent basis for this limitation in the claim. Replace “the end portion” with --an end portion--.

Claim 1, line 30 recites “a reducing transmission (22, 23)”. This should be plural since applicant illustrates there are more than one reducing transmissions via the reference numerals. Replace “a reducing transmission (22, 23)” with “reducing transmissions (22, 23)--.

Claims 4-16 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only, and/or cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 4-5, claim language recites "a base for mounting the means at a stationary or movable part, especially a vehicle". The wording is so awkward that it is unclear what a vehicle has to do with a stationary or movable part.

Claim 1 recites the limitation "the pivot plate (4)" in lines 10-11. There is insufficient antecedent basis for this limitation in the claim. It is unclear what pivot plate applicant is referring to. Is the pivot plate the same as the rotary plate since they both have the same reference numeral? According to the specification, the pivot frame is disposed on the rotary frame. Please clarify. For examining purposes, "pivot plate (4)" will be interpreted as rotary plate (4).

Claim 1 recites the limitation "the rotary frame (31)" in line 20. There is insufficient antecedent basis for this limitation in the claim. It is unclear what rotary frame applicant is referring to. Is the rotary frame the same as the pivot frame since they both have the same reference numeral? According to the specification, applicant describes the pivot frame having "at least one member fixedly connected to the rotary

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plate" (page 3, lines 1-2). Please clarify. For examining purposes, "rotary frame (31)" will be interpreted as pivot frame (31).

Claim 1, lines 24-29 recites "the pivot drive is supported in an end portion of the member (19) fixedly connected to the rotary plate (4) at the member (19)". It is unclear what applicant means by "fixedly connected". Further, it is unclear what applicant means by "at the member (19)". Or does "at the member (19)" correspond to the remainder of the phrase "transversely with respect to the axis thereof and does not protrude beyond the member (19) upwardly". It is unclear what applicant means. Does applicant mean that the pivot drive that is supported at one end of the member (19) does not protrude beyond the end of the member? Further, the claim language recites the limitation "the axis" in line 27. There is insufficient antecedent basis for this limitation in the claim. What axis is applicant referring to? Is the pivot drive or the at least one member is transverse with respect to the axis? The wording of the entire phrase regarding the description of the pivot drive is unclear and confusing. Please reword and clarify. Since the portion of the claim regarding, either the pivot drive or the at least one member being transverse with respect to an axis, is so unclear, this portion of the claim will not be treated on the merits.

Claim 1, line 30 recites "a reducing transmission (22, 23)". It is unclear what a reducing transmission is. Is it a type of gear? Please clarify.

Claim 1, lines 31-32 recites "a transmission output shaft (26) provided with a tothing and engaged with a sector gear (25)". Since the wording "tothing and

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engaged" is awkward, it is unclear as to what applicant means. Please reword and clarify.

Claim 3, line 4 recites "two members (19) fixedly connected to the rotary plate (4)". What does applicant mean by "fixedly connected"? Please clarify.

Claims not specifically addressed are indefinite due to their dependency.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki (US 2002/0139413) in view of Edling et al. (US 5,191,875). Hereinafter, Edling et al. will be referred to as Edling.

With respect to claim 1, Sasaki discloses in Fig. 1, an automatic sun follower comprising a base (1), a rotary plate (4) that is rotationally supported on the base and driven by a rotary drive (26) and a pivot frame (rectangular board on which the solar cell panel is formed) pivotally supported at the pivot plate (12) and driven by a pivot drive (17), wherein the pivot frame supports at least one solar module (solar cell panel - 11). Sasaki further discloses the pivot frame (4), which carries the solar module, includes at least one member (12) that is connected to the rotary plate (4) and a pivot member (13)

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pivotally supported at the at least one member (12) [0020]. In Fig. 12, Sasaki discloses the pivot drive (17) is supported on one end portion of the at least one member (12) and does not protrude beyond the height of the at least one member (12). Sasaki discloses in Fig. 3, the pivot drive (17) includes a motor (17), a reducing transmission (20, 21) and a transmission output shaft (22) engages with a sector gear (16) connected to the pivot member (13) of the pivot frame (layer below 11) [0021].

Sasaki discloses the inclusion of a control means that controls the rotary drive and/or pivot drive, however the control means is based upon time, and not on signals generated by an optosensor in response to the position of the sun. Sasaki and Edling are directed to a similar field of endeavor of sun followers/trackers. Edling discloses a sun tracking system that uses optosensors (18) to generate signals in response to the position of the sun and supplies the signals to a control unit (circuitry in box 86) which controls the rotary drive (84) and the pivot drive (50) (col. 4, lines 26-65). It would have been obvious to a person of ordinary skill in the art to replace the timer of Sasaki with an optosensor of Edling in order to provide a more accurate method of tracking of the sun.

With respect to claim 2, Sasaki discloses the solar module (11) can be tiled within approximately 90°, thus being able to form a 120° arc, wherein the angle of the arc is defined via Fig. 1.

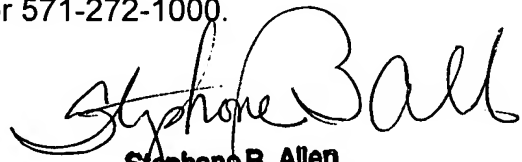
With respect to claims 1/3 or 2/3, Sasaki discloses in Fig. 1, the pivot member (13) with sector gear (16) is pivotally supported between two members (12) connected to the rotary plate (4).

Telephone/Fax Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suez Ellis whose telephone number is (571) 272-2868. The examiner can normally be reached on 8:30am-5pm (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Stephone B. Allen
Primary Examiner